

Art Unit: \*\*\*

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Claims 1-13- Cancelled

14. A method of manufacturing a test slide, comprising the steps of:

- (i) providing a substrate with an image area;
- (ii) coating at least a portion of said image area with a resist compound;
- (iii) exposing said resist compound to form a test pattern and a locating pattern

thereon;

(iv) developing said resist compound and removing portions of said resist compound from said substrate to form said test pattern and a locating pattern thereon.

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Art Unit: \*\*\*

15. The method of claim 14 wherein the exposure of step (ii) is accomplished by optical means.
16. The method of claim 14 wherein the exposure of step (iii) is accomplished by focused energy beam means.
17. The method of claim 14 wherein step (ii) further comprises the step of metallizing said portion of said image area prior to applying said resist and, in step (iv), said metallization is also removed from said substrate where said resist is removed.
18. The method of claim 17 further comprising step (v) wherein said resist is removed and said test pattern and said locating pattern is formed by metallization which remains on said substrate.
19. The method of claim 14 wherein step (iv) further comprises the step of removing a selected amount of said substrate where said resist has been removed.
20. The method of claim 19 wherein said selected amount of said substrate is removed by chemical etching.
21. The method of claim 19 further comprising the steps of:
  - (v) metallizing said portion of said image area;
  - (vi) removing said metallization from the surface of said portion of said area such that metallization remains in depressions formed by said removal of said selected amount of substrate.
22. The method of claim 21 wherein step (vi) is performed by polishing said portion.
23. The method of claim 14 wherein said substrate is a slide base.
24. The method of claim 14 wherein said substrate is a cover slip.
25. The method of claim 24 wherein said cover slip is mounted on a slide base with said test pattern on a side of said cover slip adjacent said slide base.
26. The method of claim 25 wherein an immersion fluid is located between said slide and said slide base.

Claims 27-38 Cancelled

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Art Unit: \*\*\*

39. A method of forming a test slide for microscopes, comprising the steps of:
- (i) forming a master test pattern on an information carrier for an injection molding device, said test pattern including patterns of known size and shape;
  - (ii) inserting said information carrier into said injection molding device;
  - (iii) cycling said injection molding device to inject liquefied resin into contact with said information carrier and to cool said resin to form a plastic carrier with said test pattern formed in one surface; and
  - (iv) removing said plastic carrier from said injection molding machine.
40. The method of claim 39 wherein said information carrier comprises at least two master test patterns and further comprising step (v) wherein said plastic carrier is cut to separate each of the test patterns thereon.
41. The method of claim 40 wherein said plastic carrier is cut to form conventional sized microscope slides with said test patterns being located at an image area thereon.
42. The method of claim 39 wherein said master test pattern comprises a collection of reference images.
43. The method of claim 42 wherein said images of said reference collection have been originally obtained from visible light microscopy.
44. The method of claim 42 wherein said images of said reference collection have been originally obtained from scanning electron microscopy.
45. The method of claim 42 wherein said images of said reference collection comprise a montage of images.

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Art Unit: \*\*\*

46. The method of claim 42 wherein said master test pattern further comprises a grid and where said images are arranged in said grid.
47. The method of claim 39 further comprising step (v) applying a planar layer of thin film material to at least a portion of said one surface.
48. The method of claim 47 wherein said layer is applied to said one surface in areas including image features comprising recesses in said surface such that optical interference in said layer produces colors discernable to a viewer.
49. A method of forming a test slide for microscopes, comprising the steps of:
- (i) forming a master test pattern on an information carrier for a mold, said test pattern including patterns of known size and shape;
  - (ii) inserting said information carrier into a mold;
  - (iii) adding a substrate material to said mold to contact said information carrier and setting said substrate material to form a carrier with said test pattern formed in one surface; and
  - (iv) removing said carrier from said mold.

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